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10/723,864	11/26/2003	Girsih K. Muralidharan	138256SV/YOD GEMS:0249	9698

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ART UNIT	PAPER NUMBER
2109	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	10/723,864	MURALIDHARAN, GIRSIH .K.
	Examiner	Art Unit	
	Mark D. Fearer	2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *November 26, 2003*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-49* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-49* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *26 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15-17, 20, 24-25, 27, 31, 36 and 40-41 are rejected under 35

U.S.C. 102(b) as being anticipated by Tokunaga et al. (US 5968132 A).

Consider claim 15. Tokunaga et al. clearly shows and discloses a method for

adapting screen updates based on network congestion, the method comprising:

measuring network performance between a serving station and a served station (("The

transmitting unit 17 has a data transmitting unit 2, a traffic detecting unit 3 and a

communication data quantity adjusting unit 4, whereas the receiving unit 18 has a data

receiving unit 12, a data identifying unit 13, a display control unit 15 and a displaying

unit 16.") column 5 lines 63-67), wherein the serving station provides screen data

derived from an imaging system to the served station (("The data transmitting unit 2 of

the transmitting unit 17 transmits image data to another image data communicating unit

19. The traffic detecting unit 3 detects the traffic of the network 20.") column 6 lines 1-4);

and adjusting the screen data transmitted to the served station automatically based on

the measurement of the network performance (("The communication data quantity

adjusting unit 4 sets a transmittable number of image transferring frames on the basis of

the traffic detected by the traffic detecting unit 3 to automatically adjust the quantity of

communication data in the data transmitting unit 2 on the basis of the set number of

frames.") column 6 lines 5-10).

Consider claim 16, and as applied to claim 15 above. Tokunaga et al. clearly

shows and discloses a method wherein measuring network performance comprises

transmitting a test packet from the serving station and receiving a response packet from

the served station (("In this embodiment described above, a traffic value is determined

using survey data. However, this invention is not limited to the above example, but it is

possible that the OS/network driver 41 detects the number of times of collision of

packets in the network apparatus 23, and the detected number of times of collision of

packets is used as a traffic value. In which case, a table including the number of times

of collision and the number of frames is prepared to determine the number of image

transferring frames using this table.") column 16 lines 17-26).

Consider claim 17, and as applied to claim 15 above. Tokunaga et al. clearly

shows and discloses a method comprising converting image data from the imaging

system into screen data (("FIG. 11 is an image data communication system to which an

image data communicating apparatus according to a second embodiment of this

invention is applied. The image data communication system shown in FIG. 11 has an

image transmitting side computer 21a as the image data communicating apparatus

having a structure different from that according to the first embodiment described

hereinbefore. Other parts of the structure remain the same as the image data

communication system according to the first embodiment, detailed description of which are thus omitted.) column 16 lines 28-37 ("The network receiving unit 43 of the image receiving side computer 22 examines, for example, the first octet of received data. If the received data is identified as image data, the image receiving unit 44 receives it, and the image displaying unit 45 displays it under its control on the image displaying unit 25 (Step T2).") column 18 lines 14-19).

Consider claim 20, and as applied to claim 15 above. Tokunaga et al. clearly shows and discloses a method comprising transmitting the screen data to the served station from the serving station (("A data receiving unit 12 serves for receiving the image data from another image data communicating apparatus 19 over the network 20. A data identifying unit identifies the type of data received by the data receiving unit 12.") column 4 lines 58-61).

Consider claim 24. Tokunaga et al. clearly shows and discloses a computer program provided on one or more tangible media (("The image transmitting side computer 21 functionally has an image inputting unit 38, an image transmitting unit 39, a network transmitting unit 40, an OS/network driver 41 and a traffic control table 40-1. When these functions are executed, the OS in the OS/network driver 41 is loaded into the main storage 28 and the MPU 27 successively executes a program stored in the main storage 28.") column 12 lines 20-26) for adapting screen updates based on network congestion, the computer program comprising: a routine for measuring network performance between a serving station and a served station (("The transmitting unit 17 has a data transmitting unit 2, a traffic detecting unit 3 and a communication data

quantity adjusting unit 4, whereas the receiving unit 18 has a data receiving unit 12, a

data identifying unit 13, a display control unit 15 and a displaying unit 16.") column 5

lines 63-67), wherein the serving station is associated with an imaging system (("The

data transmitting unit 2 of the transmitting unit 17 transmits image data to another image

data communicating unit 19. The traffic detecting unit 3 detects the traffic of the network

20.") column 6 lines 1-4); and a routine for dynamically modifying a plurality of screen

updates transmitted to the served station for display based on a measurement relating

to network performance (("The communication data quantity adjusting unit 4 sets a

transmittable number of image transferring frames on the basis of the traffic detected by

the traffic detecting unit 3 to automatically adjust the quantity of communication data in

the data transmitting unit 2 on the basis of the set number of frames.") column 6 lines 5-

10).

Consider claim 25. Tokunaga et al. clearly shows and discloses a computer

program comprising a routine for acquiring imaging data from the imaging system,

wherein the plurality of screen updates are based on the imaging data. (("The image

data communicating apparatus 1a may have a first image data compressing unit for

compressing image data that should be transmitted. In addition, the image data

communicating apparatus may further have a compression parameter controlling unit

for variably controlling a compression parameter by the first image data compressing

unit so as to bring the number of frames close to the number of frames initially set by

the communication data quantity adjusting unit 4 if the traffic detecting unit 3 judges that

image data cannot be transferred in an initial quantity of communication data.") column

3 lines 23-33).

Consider claim 27. Tokunaga et al. clearly shows and discloses a computer

program comprising a routine for determining the network latency between the serving

station and the served station (("A data transmitting unit 2 operates for transmitting the

image data to another image data communicating unit 19. A traffic detecting unit 3

detects traffic of the network 20.") column 4 lines 18-21 ("The image transmitting side

computer 21 functionally has an image inputting unit 38, an image transmitting unit 39, a

network transmitting unit 40, an OS/network driver 41 and a traffic control table 40-1.

When these functions are executed, the OS in the OS/network driver 41 is loaded into

the main storage 28 and the MPU 27 successively executes a program stored in the

main storage 28.") column 12 lines 20-26).

Consider claim 31. Tokunaga et al. clearly shows and discloses a method for

adapting screen updates based on network performance, the method comprising:

detecting network performance between a serving station and a served station (("The

transmitting unit 17 has a data transmitting unit 2, a traffic detecting unit 3 and a

communication data quantity adjusting unit 4, whereas the receiving unit 18 has a data

receiving unit 12, a data identifying unit 13, a display control unit 15 and a displaying

unit 16.") column 5 lines 63-67); comparing the network performance to a specified

range (("If current traffic of the network apparatus 23 gets more crowded than an initial

traffic of the network apparatus 23, the image data communicating apparatus

implements image compression on the basis of a compression parameter, which was

set based on a traffic of the network, to transmit compressed image data, thereby

controlling a transferable number of frames for the image data so as to bring the

quantity of transmitted frames close to the initial number of frames.") column 22 lines

46-54); and modifying a plurality of screen updates dynamically based upon the

comparison of the network performance (("The communication data quantity adjusting

unit 4 sets a transmittable number of image transferring frames on the basis of the

traffic detected by the traffic detecting unit 3 to automatically adjust the quantity of

communication data in the data transmitting unit 2 on the basis of the set number of

frames.") column 6 lines 5-10).

Consider claim 36. Tokunaga et al. clearly shows and discloses a computer

program provided on one or more tangible media (("The image transmitting side

computer 21 functionally has an image inputting unit 38, an image transmitting unit 39, a

network transmitting unit 40, an OS/network driver 41 and a traffic control table 40-1.

When these functions are executed, the OS in the OS/network driver 41 is loaded into

the main storage 28 and the MPU 27 successively executes a program stored in the

main storage 28.") column 12 lines 20-26) for adapting screen updates based on

network performance, the computer program comprising: a routine for detecting network

performance between a serving station and a served station (("The transmitting unit 17

has a data transmitting unit 2, a traffic detecting unit 3 and a communication data

quantity adjusting unit 4, whereas the receiving unit 18 has a data receiving unit 12, a

data identifying unit 13, a display control unit 15 and a displaying unit 16.") column 5

lines 63-67); a routine for comparing the network performance to a specified range (("If

current traffic of the network apparatus 23 gets more crowded than an initial traffic of the

network apparatus 23, the image data communicating apparatus implements image

compression on the basis of a compression parameter, which was set based on a traffic

of the network, to transmit compressed image data, thereby controlling a transferable

number of frames for the image data so as to bring the quantity of transmitted frames

close to the initial number of frames.") column 22 lines 46-54); and a routine for

modifying a plurality of screen updates being transmitted to the served station from the

serving station based on the measurement of the network performance (("The

communication data quantity adjusting unit 4 sets a transmittable number of image

transferring frames on the basis of the traffic detected by the traffic detecting unit 3 to

automatically adjust the quantity of communication data in the data transmitting unit 2

on the basis of the set number of frames.") column 6 lines 5-10).

Consider claim 40. Tokunaga et al. clearly shows and discloses a system for

adapting screen updates based on network performance, the system comprising:

means for detecting network performance between a serving station and a served

station (("The transmitting unit 17 has a data transmitting unit 2, a traffic detecting unit 3

and a communication data quantity adjusting unit 4, whereas the receiving unit 18 has a

data receiving unit 12, a data identifying unit 13, a display control unit 15 and a

displaying unit 16.") column 5 lines 63-67); means for comparing the network

performance to a specified range; and means for dynamically modifying a plurality of

screen updates based upon the comparison of the network performance to the specified

range (("If current traffic of the network apparatus 23 gets more crowded than an initial

traffic of the network apparatus 23, the image data communicating apparatus

implements image compression on the basis of a compression parameter, which was

set based on a traffic of the network, to transmit compressed image data, thereby

controlling a transferable number of frames for the image data so as to bring the

quantity of transmitted frames close to the initial number of frames.") column 22 lines

46-54 ("The communication data quantity adjusting unit 4 sets a transmittable number of

image transferring frames on the basis of the traffic detected by the traffic detecting unit

3 to automatically adjust the quantity of communication data in the data transmitting unit

2 on the basis of the set number of frames.") column 6 lines 5-10).

Consider claim 41. Tokunaga et al. clearly shows and discloses a system for

adapting screen updates based on network congestion, the system comprising: means

for measuring network performance between a serving station and a served station

(("The transmitting unit 17 has a data transmitting unit 2, a traffic detecting unit 3 and a

communication data quantity adjusting unit 4, whereas the receiving unit 18 has a data

receiving unit 12, a data identifying unit 13, a display control unit 15 and a displaying

unit 16.") column 5 lines 63-67), wherein the serving station provides screen data

derived from an imaging system to the served station (("The data transmitting unit 2 of

the transmitting unit 17 transmits image data to another image data communicating unit

19. The traffic detecting unit 3 detects the traffic of the network 20.") column 6 lines 1-4);

and means for automatically adjusting the screen data transmitted to the served station

based on the measurement of the network performance (("The communication data

quantity adjusting unit 4 sets a transmittable number of image transferring frames on the

basis of the traffic detected by the traffic detecting unit 3 to automatically adjust the

quantity of communication data in the data transmitting unit 2 on the basis of the set

number of frames.") column 6 lines 5-10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-2, 6, 9, 11, 13, 42, 46 and 49 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Huffman (US 20040005094 A1) in view of Machida (US

6642943 B1).

Regarding claim 1. Huffman clearly shows and discloses a system wherein a

server receives image data, a coefficient block scans pixel coordinates of the image

data; and a compression engine to modify an encoding format of the image data, a

client receiving image data from the server via a network. This reads on the claimed "A

remote viewing system, comprising: a serving station configured to receive image data,

the serving station comprising: a scanner module configured to modify a scanning rate .

of the image data; and an encoder module configured to modify an encoding format of

the image data; a served station configured to receive modified image data from the

serving station via a network; ..." (("In response to the client request, the server extracts

transform data defined by the request.") paragraph 0008 ("In one embodiment for image

distribution, client application 460 generates a set of pixel coordinates to identify a

portion of the source image 110 at a specified resolution. In turn, coefficient block

request processing 420 maps the pixel coordinates at a specified resolution to

coefficient coordinates.") paragraph 0048 ("In general, the compression engine 140

compresses, using a lossless encoder technique, the pyramidal data representation(s)

130.") paragraph 0020 ("The server transfers the compressed data to the client. The

client decompresses the compressed data to obtain quantized data, and de-quantizes

the quantized data to recover the transform data.") paragraph 0008). However, Huffman

fails to teach a plurality of network sensors for detecting network congestion. Machida

discloses a system wherein network traffic is monitored and image data going across a

network is adjusted accordingly. This reads on the claimed "… a plurality of network

sensors in communication with the serving station and configured to provide network

performance data to the serving station, wherein the serving station dynamically

modifies at least one of the scanning rate and the encoding format based on the

network performance data." (("Resolution which is adjusted by a slider 410 is

automatically set in 1/2 of the highest resolution of the selected output device side, in consideration of traffic of the image data managed on the network. Further, it is assumed that the resolution which is identical or close to the automatically set resolution is automatically set as the resolution of the input device side.") column 15 lines 36-42 ("... the network traffic quantity is always monitored by the management server.") column 37 lines 28-29).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a network sensing apparatus as taught by Machida with an imaging system as taught by Huffman for the purpose of sending image data according to available network bandwidth.

Regarding claim 2, and as applied to claim 1 above, Huffman discloses a system wherein a serving station serves an image to a client. This reads on the claimed "The remote viewing system of claim 1, ... serving station ..." (("In a client-server embodiment, a client issues to a server a request for at least a portion of the source data. The request defines a block of the coefficients and at least one quantization value. In response to the client request, the server extracts transform data defined by the request. The transform data is quantized, in accordance with the quantization value, and is compressed to generate compressed data. The server transfers the compressed data to the client.") paragraph 0008). However, Huffman fails to teach a system wherein the serving station comprises its own display. Machida discloses a system wherein a management server comprises a display apparatus. This reads on the claimed "... the serving station comprises a monitor for presenting image data to an operator." (("...

information is displayed on a display apparatus of the PC or the management server of

the demand sender.") column 21 lines 2-4).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate a management server comprising a

display apparatus as taught by Machida with an image serving station as taught by

Huffman for the purpose of local administration of a server.

Regarding claim 6, and as applied to claim 1 above. Huffman, as modified by

Machida, clearly shows and discloses a remote viewing system wherein the serving

station is in communication with an imaging system configured to detect a plurality of

signals that are convertible into an image ((" In general, multi-spectral transform data

aggregates multi-components of the source image into a vector for the transform data.

Through use of multi-spectral transform data, the wavelet transform may aggregate

multi-dimensional data (e.g., two dimensional, three dimensional, etc.) for a source

image.") paragraph 0097), the imaging system configured to produce the image data

((For this embodiment, a medical imaging system optionally includes imaging

equipment 700 to generate medical images 720 for optional storage in electronic form in

an image archive 710. The image archive 710 contains electronic storage components

such as disk drives and tape drives used to store the images in a highly reliable

manner.") paragraph 0090).

Regarding claim 9, and as applied to claim 1 above, Huffman discloses a system comprising a network. This reads on the claimed "The remote viewing system of claim 1, wherein the network ...." (("The present invention is directed toward the field of data transfer, and more particularly toward compressing transform data for efficient distribution across a network.") paragraph 0002). However, Huffman fails to teach a system comprising a wide area network. Machida discloses a system wherein two LANs are connected to form a WAN. This reads on the claimed "... the network comprises a wide area network." (("Basically, the WAN is composed of the plural LAN's which are connected together through a high-speed digital line such as ISDN (Integrated Services Digital Network). For example, as shown in FIG. 1, when the LAN 100 and the LAN 120 are connected with each other through a backbone 140, the WAN is established.") column 5 lines 1-6).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a wide area network as taught by Machida with a network as taught by Huffman for the purpose of large scale distribution of data.

Regarding claim 11, and as applied to claim 1 above. Huffman, as modified by Machida, clearly shows and discloses a remote viewing system wherein a serving station receives a medical image (("For this embodiment, the medical imaging system includes at least one image server 730. As shown in FIG. 7, the image server 730 is coupled to a plurality of clients 740, 750 and 760. The medical images 720 are

processed, by decomposition processing 120, to generate a pyramidal data structure 130.")).

Regarding claim 13, and as applied to claim 1 above. Huffman, as modified by Machida, clearly shows and discloses a system wherein a client issues a request to the serving station (("To view portions of the image at the client, the client issues requests for data that include coefficient coordinates to identify coefficients in the hierarchical representation.") paragraph 0006).

Regarding claim 42. Huffman clearly shows and discloses a medical imaging system wherein an imaging system detects a plurality of signals that are convertible into an image; an imaging system produces image data; a server receives image data, a coefficient block scans pixel coordinates of the image data; and a compression engine to modify an encoding format of the image data, a client receiving image data from the server via a network. This reads on the claimed "A remote viewing system for a medical imaging system, comprising: an imaging system configured to detect a plurality of signals that are convertible into an image, the system configured to produce image data; a serving station configured to receive the image data, the serving station comprising: a scanner module configured to modify a scanning rate of the image data; and an encoder module configured to modify an encoding format of the image data; a served station configured to receive modified image data from the serving station via a network; ..." (("A technique for distributing large images over a network, such as medical images, has been developed by Dr. Paul Chang, M.D., and Carlos Bentancourt at the University of Pittsburgh. This technique, referred to as dynamic transfer syntax,

operates in a client-server environment to deliver, from the server to the client, image

data as the image data is needed at the client (i.e., a just in time data delivery

mechanism). To implement this "just in time" data delivery mechanism, the dynamic

transfer syntax generates a flexible hierarchical representation of an image for storage

at the server. The hierarchical representation consists of coefficients produced by a

wavelet transform. To view portions of the image at the client, the client issues requests

for data that include coefficient coordinates to identify coefficients in the hierarchical

representation.") paragraph 0006 ("In response to the client request, the server extracts

transform data defined by the request.") paragraph 0008 ("In one embodiment for image

distribution, client application 460 generates a set of pixel coordinates to identify a

portion of the source image 110 at a specified resolution. In turn, coefficient block

request processing 420 maps the pixel coordinates at a specified resolution to

coefficient coordinates.") paragraph 0048 ("In general, the compression engine 140

compresses, using a lossless encoder technique, the pyramidal data representation(s)

130.") paragraph 0020 ("The server transfers the compressed data to the client. The

client decompresses the compressed data to obtain quantized data, and de-quantizes

the quantized data to recover the transform data.") paragraph 0008). However, Huffman

fails to teach a plurality of network sensors for detecting network congestion. Machida

discloses a system wherein network traffic is monitored and image data going across a

network is adjusted accordingly. This reads on the claimed "... a plurality of network

sensors in communication with the serving station and configured to provide network

performance data to the serving station, wherein the serving station dynamically

modifies at least one of the scanning rate and the encoding format based on the network performance data." (("Resolution which is adjusted by a slider 410 is automatically set in 1/2 of the highest resolution of the selected output device side, in consideration of traffic of the image data managed on the network. Further, it is assumed that the resolution which is identical or close to the automatically set resolution is automatically set as the resolution of the input device side.") column 15 lines 36-42 ("… the network traffic quantity is always monitored by the management server.") column 37 lines 28-29).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a network sensing apparatus as taught by Machida with a medical imaging system as taught by Huffman for the purpose of sending medical image data across a network according to available network bandwidth.

Regarding claim 46, and as applied to claim 42 above, Huffman discloses a remote medical imaging system comprising a network. This reads on the claimed "The remote viewing system of claim 42, wherein the network …" (("A compression technique, for use in a network environment, compresses transform data to improve transmission rates in low bandwidth applications. In one embodiment, the source data comprises source images, such as medical images.") paragraph 0008). However, Huffman fails to teach a system comprising a wide area network. Machida discloses a system wherein two LANs are connected to form a WAN. This reads on the claimed "… the network comprises a wide area network." (("Basically, the WAN is composed of the

plural LAN's which are connected together through a high-speed digital line such as

ISDN (Integrated Services Digital Network). For example, as shown in FIG. 1, when the

LAN 100 and the LAN 120 are connected with each other through a backbone 140, the

WAN is established.") column 5 lines 1-6).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate a wide area network as taught by

Machida with a remote medical imaging system network as taught by Huffman for the

purpose of large scale distribution of medical imaging data.

Regarding claim 49, and as applied to claim 42 above. Huffman, as modified by

Machida, clearly shows and discloses a remote medical imaging system wherein a

served station transmits remote input data to a serving station (("To view portions of the

image at the client, the client issues requests for data that include coefficient

coordinates to identify coefficients in the hierarchical representation.") paragraph 0006).

Claims 3-5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Huffman (US 20040005094 A1) as modified by Machida (US 6642943 B1) and in

further view of Grace et al. (US 7143159 B1).

Regarding claim 3, and as applied to claim 2 above, Huffman discloses a system

wherein a serving station serves an image to a client. This reads on the claimed "The

remote viewing system of claim 2, ... the serving station ..." (("In a client-server

embodiment, a client issues to a server a request for at least a portion of the source

data. The request defines a block of the coefficients and at least one quantization value.

In response to the client request, the server extracts transform data defined by the request. The transform data is quantized, in accordance with the quantization value, and is compressed to generate compressed data. The server transfers the compressed data to the client.") paragraph 0008). However, Huffman fails to teach a system wherein the serving station comprises its own display. Machida discloses a system wherein a management server comprises a display apparatus. This reads on the claimed "The remote viewing system of claim 2, wherein the serving station is configured to present an indication ..." (("... information is displayed on a display apparatus of the PC or the management server of the demand sender.") column 21 lines 2-4). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a management server comprising a display apparatus as taught by Machida with an image serving station as taught by Huffman for the purpose of local administration of a server. However, Huffman, as modified by Machida, fails to teach a serving station comprising a display that shows network performance data. Grace et al. discloses a system wherein network performance data is output to a screen. This reads on the claimed "... the serving station is configured to present an indication associated with the network performance data to the operator." (("The present inventors have also realized that an effective method for presenting Network management data is via a split window display. The split window display includes two windows, each with scrolling capability, selection buttons for varying a view presented in the windows, and a search utility to pinpoint user specified data instances in the network management data. The

split window display presents high level network data in a first window using an

expandable/collapsible tree format.") column 6 lines 42-50).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate displayed network performance data as

taught by Grace et al. with a serving station comprising a display as taught by Huffman,

as modified by Machida, for the purpose of monitoring network performance.

Regarding claim 4, and as applied to claim 3 above, Huffman, as modified by

Machida, discloses a system wherein a management server comprises a display

apparatus. This reads on the claimed "The remote viewing system of claim 3, ... the

indication ..." (("... information is displayed on a display apparatus of the PC or the

management server of the demand sender.") column 21 lines 2-4). However, Huffman,

as modified by Machida, fails to teach a serving station comprising a display that shows

network performance data. Grace et al. discloses a system wherein network

performance data is output to a screen. This reads on the claimed "The remote viewing

system of claim 3, wherein the indication comprises a bar chart." (("In this example,

network protocol ip 1030 is selected, and display side 750 includes network traffic

statistics (bytes per second) for each of the children application protocols (www-http

1040, smb 1042, and nbt_data 1044). In this embodiment, the network traffic statistics

are shown as a bar graph indicating the number of bytes per second, ...") column 19

lines 53-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate displayed network performance data as taught by Grace et al. with a serving station comprising a display as taught by Huffman, as modified by Machida, for the purpose of monitoring network performance in a specific format.

Regarding claim 5, and as applied to claim 3 above, Huffman, as modified by Machida, discloses a system wherein a management server comprises a display apparatus. This reads on the claimed "The remote viewing system of claim 3, .. the indication ..." (("... information is displayed on a display apparatus of the PC or the management server of the demand sender.") column 21 lines 2-4). However, Huffman, as modified by Machida, fails to teach a serving station comprising a display that shows network performance data. Grace et al. discloses a system wherein network performance data is output to a screen. This reads on the claimed "The remote viewing system of claim 3, wherein the indication comprises a network indicator that relates to the network performance data." (("The present invention gathers data describing the network traffic using RMON standard and RMON extension MIBs and correlates the data to determine useful statistics about the traffic (application originating the traffic, protocols utilized, etc.), and provide a useful display of the traffic and protocols.") column 6 lines 35-41).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate displayed network performance data as

taught by Grace et al. with a serving station comprising a display as taught by Huffman,

as modified by Machida, for the purpose of monitoring network performance.

Regarding claim 10, and as applied to claim 1 above, Huffman, as modified by

Machida, discloses a system wherein local area networks are connected to form wide

area networks. This reads on the claimed "The remote viewing system of claim 1,

wherein the network ...". However, Huffman, as modified by Machida, fails to teach of a

connection to the internet. Grace et al. discloses a system wherein a wide area network

comprises an internet connection. This reads on the claimed "... the network comprises

an Internet." (("Local area networks (LANs) are arrangements of various hardware and

software elements that operate together to allow a number of digital devices to

exchange data within the LAN and also may include internet connections to external

wide area networks (WANs).") column 2 lines 36-40).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate a wide area network comprising an

internet connection as taught by Grace et al. with wide area networking as taught by

Huffman, as modified by Machida, for the purpose of internet access.

Claims 7-8 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Huffman (US 20040005094 A1) as modified by Machida (US 6642943 B1) and in

further view of Aweya et al. (US 7047312 B1).

Regarding claim 7, and as applied to claim 1 above, Huffman, as modified by

Machida, discloses a system wherein sensors determine network traffic and adjust

image data flow accordingly. This reads on the claimed "The remote viewing system of

claim 1, wherein the plurality of network sensors ...". However, Huffman, as modified by

Machida, fails to teach the network sensors using packet information for gauging

network congestion. Aweya et al. discloses exchanging TCP packet information as a

network test. This reads on the claimed "The remote viewing system of claim 1, wherein

the plurality of network sensors exchange a plurality of packets to determine network

congestion." (("The network device's window size represents the maximum number of

packets that a TCP connection can have in transit (i.e., unacknowledged by a receiver)

at a time. In determining the network device's window size per connection, one

embodiment of the TCP rate control scheme tries to match the sum of the windows of

all the active TCP connections sharing the network node to the network bandwidth-

delay product plus the available buffering space, thus avoiding packet losses whenever

possible. The method takes its decision of modifying the receiver's advertised window of

an incoming ACK packet so that the queue occupancy level is kept at a given target

level, thereby eliminating buffer underflow and overflow as much as possible.")

column 6 lines 17-29).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate exchanging TCP packet information as

taught by Aweya et al. with network traffic sensors as taught by Huffman, as modified by

Machida, for the purpose of network analysis for optimal performance of a network.

Regarding claim 8, and as applied to claim 1 above, Huffman, as modified by

Machida, discloses a system wherein sensors determine network traffic and adjust

image data flow accordingly. This reads on the claimed "The remote viewing system of claim 1, wherein the plurality of network sensors ...". However, Huffman, as modified Machida, fails to teach using TCP packets to test network latency. Aweya et al. discloses a system wherein the window control mechanism of TCP is used to gauge network latency. This reads on the claimed "The remote viewing system of claim 1, wherein the plurality of network sensors exchange a plurality of packets to determine network latency." (("In a high-latency network environment, the window flow control mechanism of TCP may not be very effective because it relies on packet loss to signal congestion, instead of avoiding congestion and buffer overflow.") column 1 lines 38-41).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate latency testing of networks as taught by Aweya et al. with a network wherein the amount of transmitted data is adjusted to correspond with current network traffic conditions as taught by Huffman, as modified by Machida, for the purpose of network analysis for optimal performance of a network.

Regarding claim 47, and as applied to claim 42 above, Huffman, as modified by Machida, discloses a remote medical imaging system wherein sensors determine network traffic and adjust image data flow accordingly. This reads on the claimed "The remote viewing system of claim 42, wherein the plurality of network sensors ... determine network latency.". However, Huffman, as modified Machida, fails to teach using TCP packets to test network latency. Aweya et al. discloses a system wherein the window control mechanism of TCP is used to gauge network latency. This reads on the claimed "... the plurality of network sensors exchange a plurality of packets to determine

network latency." (("In a high-latency network environment, the window flow control

mechanism of TCP may not be very effective because it relies on packet loss to signal

congestion, instead of avoiding congestion and buffer overflow.") column 1 lines 38-41).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate latency testing of networks as taught by

Aweya et al. with a network wherein the amount of transmitted data is adjusted to

correspond with current network traffic conditions as taught by Huffman, as modified by

Machida, for the purpose of network analysis for optimal performance of a medical

image network.

Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being obvious over

Huffman (US 20040005094 A1) as modified by Machida (US 6642943 B1) and in further

view of Deaven et al. (US 20050111711 A1).

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome

by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not an

invention " by another" ; (2) a showing of a date of invention for the claimed subject

matter of the application which corresponds to subject matter disclosed but not claimed

in the reference, prior to the effective U.S. filing date of the reference under 37 CFR

1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and

reference are currently owned by the same party and that the inventor named in the

application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer

in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing

that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under

35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Regarding claim 12, and as applied to claim 1 above, Huffman, as modified by

Machida, discloses a system wherein a medical image is presented to a served station.

This reads on the claimed "The remote viewing system of claim 1, wherein the serving

station ... transmit the modified image data to the served station.". However, Huffman,

as modified by Machida, fails to teach of the remote framebuffer protocol (RFP).

Deaven et al. discloses a system comprising framebuffer communication for image

quality. This reads on the claimed "The remote viewing system of claim 1, wherein the

serving station utilizes a remote framebuffer protocol to transmit the modified image

data to the served station." (("In particular, the collaborative session provides

framebuffer communication with sufficient image quality for diagnostic review and

analysis at the participating nodes. In one possible implementation of this example, the

collaborative imaging environment may be based on the remote framebuffer (RFB)

protocol for sharing graphical framebuffers and a multicasting audio connection based

on network socket inter-process communication (IPC).") paragraph 0020).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate framebuffer communication as taught by

Deaven et al. with a served medical image as taught by Huffman, as modified by

Machida, for the purpose of stateless, thin-client remote access.

Regarding claim 14, and as applied to claim 1 above, Huffman, as modified by

Machida, discloses a system wherein a serving station receives input data. This reads

on the claimed "The remote viewing system of claim 1, wherein the serving station

receives ... input data ..." (("To view portions of the image at the client, the client issues

requests for data that include coefficient coordinates to identify coefficients in the

hierarchical representation.") paragraph 0006). However, Huffman, as modified by

Machida, fails to teach a system wherein a local operator inputs data to a local serving

station. Deaven et al. discloses a system wherein a local operator inputs data to a local

serving station. This reads on the claimed "... the serving station receives local input

data from a local operator via an input device that is coupled to the serving station."

(("For example, the software rendering and visualization tools used by the technologist

and/or radiologist may be provided to the various participating nodes, allowing operators

at those nodes to concurrently view, modify, or process an image data set during the

collaborative session. Furthermore, operators at the different nodes joined in a

collaborative session may be in communication with one another during the session,

such as over a separate voice line, over the network via text-based messaging, or over

the network using an audio protocol, such as Voice-over-Internet (VOI).") paragraph

0018). It is inherent that an input device such as a keyboard or a mouse will be used by

an operator to view, modify or process an image at a local serving station.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate local operators controlling data at local serving stations as taught by Deaven et al. with a system wherein a serving station receives data as taught by Huffman, as modified by Machida, for the purpose of local control of a workstation.

Claim 18 is rejected under 35 U.S.C. 103(a) as being obvious over Tokunaga et al. (US 5968132 A) in view of Kelley et al. (US 20020082864 A1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Regarding claim 18, and as applied to claim 15 above, Tokunaga et al. discloses a method wherein an imaging system provides screen data to a served station. This reads on the claimed "The method of claim 15, wherein the imaging system ..." (("The present invention relates to an image data communicating apparatus and a communication data quantity adjusting method used in an image data communication system suitable for used when image data such as video images or the like is transferred in a network environment.") column 1 lines 8-12). However, Tokunaga et al. fails to teach a method of computer tomography. Kelley et al. discloses a method wherein an imaging system comprises a computed tomography imaging system, an magnetic resonance imaging system, a tomosynthesis system, a positron emission tomography imaging system, and a X-ray imaging system. This reads on the claimed "... the imaging system comprises one of a computed tomography imaging system, an magnetic resonance imaging system, a tomosynthesis system, a positron emission tomography imaging system, and a X-ray imaging system." (("Currently, a number of modalities exist for medical diagnostic and imaging systems. These include computed tomography (CT) systems, x-ray systems (including both conventional and digital or digitized imaging systems), magnetic resonance (MR) systems, positron emission tomography (PET) systems, ultrasound systems, nuclear medicine systems, and so forth. In many instances, these modalities complement one another and offer the physician a range of techniques for imaging particular types of tissue, organs, physiological systems, and so forth. Health care institutions often dispose of several

such imaging systems at a single or multiple facilities, permitting its physicians to draw

upon such resources as required by particular patient needs.") paragraph 0004).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate magnetic resonance tomography (MRT)

as taught by Kelley et al. with an imaging system as taught by Tokunaga et al. for the

purpose of rendering images of the inside of an object.

Claims 19, 29, 33 and 38 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Tokunaga et al. (US 5968132 A) in view of Wiklof et al. (US

20050023356 A1).

Regarding claim 19, and as applied to claim 15 above, Tokunaga et al. discloses

a method wherein an imaging system provides screen data to a served station. This

reads on the claimed "The method of claim 15, wherein adjusting ..." (("The present

invention relates to an image data communicating apparatus and a communication data

quantity adjusting method used in an image data communication system suitable for

used when image data such as video images or the like is transferred in a network

environment.") column 1 lines 8-12). However, Tokunaga et al. fails to teach using a

framebuffer to manipulate a displayed image. Wiklof et al. discloses a system that

modifies a framebuffer to adjust displayed images. This reads on the claimed "The

method of claim 15, wherein adjusting comprises modifying a frame buffer scanning

algorithm based on the network performance" (("FIG. 2 is a block diagram that

illustrates one control approach for adjusting variable illuminator intensity. Initially, a

drive circuit drives the light source based upon a pattern, which may be embodied as digital data values in a frame buffer 202. The frame buffer 202 drives variable illuminator 109, which may, for instance comprise an illuminator and scanner as in FIG. 1. For each spot or region, the amount of scattered light is detected and converted into an electrical signal by detector 116. Detector 116 may include an A/D converter that outputs the electrical signal as a binary value, for instance. One may refer to this detected value as a residual. The residual is inverted by inverter 208, and is optionally processed by optional intra-frame image processor 210. The inverted residual or processed value is then added to the corresponding value in the frame buffer 202 by adder 212. This proceeds through the entire frame or FOV until all spots have been scanned and their corresponding frame buffer values modified. The process is then repeated for a second frame, a third frame, etc. until all spot residuals have converged. In some embodiments and particularly those represented by FIG. 4a, the pattern in the frame buffer represents the inverse of the real-world image in the FOV at this point, akin to the way a photographic negative represents the inverse of its corresponding real-world image.") paragraph 0077).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate manipulating framebuffers to adjust a displayed image as taught by Wiklof et al. with an imaging system as taught by Tokunaga et al. for the purpose of adjusting a displayed image.

Regarding claim 29, and as applied to claim 24 above, Tokunaga et al. discloses a computer program product that, when executed, an imaging system provides screen

data to a served station. This reads on the claimed "The computer program, as set forth

in claim 24, wherein the plurality of screen updates is modified ..." (("The present

invention relates to an image data communicating apparatus and a communication data

quantity adjusting method used in an image data communication system suitable for

used when image data such as video images or the like is transferred in a network

environment.") column 1 lines 8-12). However, Tokunaga et al. fails to teach using a

framebuffer to manipulate a displayed image. Wiklof et al. discloses a computer

program product that, when executed, modifies a framebuffer to adjust displayed

images. This reads on the claimed "... the plurality of screen updates is modified by

adjusting a frame buffer scanning algorithm." (("FIG. 2 is a block diagram that illustrates

one control approach for adjusting variable illuminator intensity. Initially, a drive circuit

drives the light source based upon a pattern, which may be embodied as digital data

values in a frame buffer 202. The frame buffer 202 drives variable illuminator 109, which

may, for instance comprise an illuminator and scanner as in FIG. 1. For each spot or

region, the amount of scattered light is detected and converted into an electrical signal

by detector 116. Detector 116 may include an A/D converter that outputs the electrical

signal as a binary value, for instance. One may refer to this detected value as a

residual. The residual is inverted by inverter 208, and is optionally processed by

optional intra-frame image processor 210. The inverted residual or processed value is

then added to the corresponding value in the frame buffer 202 by adder 212. This

proceeds through the entire frame or FOV until all spots have been scanned and their

corresponding frame buffer values modified. The process is then repeated for a second

frame, a third frame, etc. until all spot residuals have converged. In some embodiments and particularly those represented by FIG. 4a, the pattern in the frame buffer represents the inverse of the real-world image in the FOV at this point, akin to the way a photographic negative represents the inverse of its corresponding real-world image.") paragraph 0077).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate manipulating framebuffers to adjust a displayed image as taught by Wiklof et al. with an imaging system as taught by Tokunaga et al. for the purpose of adjusting a displayed image.

Regarding claim 33, and as applied to claim 31 above, Tokunaga et al. discloses a method wherein an imaging system provides screen data to a served station and adjusts the quantity to suit the current network level of performance. This reads on the claimed "The method of claim 31, wherein dynamically modifying the plurality of screen updates ... based on the network performance." (("The present invention relates to an image data communicating apparatus and a communication data quantity adjusting method used in an image data communication system suitable for used when image data such as video images or the like is transferred in a network environment.") column 1 lines 8-12). However, Tokunaga et al. fails to teach using a framebuffer to manipulate a displayed image. Wiklof et al. discloses a system that modifies a framebuffer to adjust displayed images. This reads on the claimed "... dynamically modifying the plurality of screen updates comprises adjusting a frame buffer scanning algorithm based on the network performance." (("FIG. 2 is a block diagram that illustrates one control approach

for adjusting variable illuminator intensity. Initially, a drive circuit drives the light source

based upon a pattern, which may be embodied as digital data values in a frame buffer

202. The frame buffer 202 drives variable illuminator 109, which may, for instance

comprise an illuminator and scanner as in FIG. 1. For each spot or region, the amount

of scattered light is detected and converted into an electrical signal by detector 116.

Detector 116 may include an A/D converter that outputs the electrical signal as a binary

value, for instance. One may refer to this detected value as a residual. The residual is

inverted by inverter 208, and is optionally processed by optional intra-frame image

processor 210. The inverted residual or processed value is then added to the

corresponding value in the frame buffer 202 by adder 212. This proceeds through the

entire frame or FOV until all spots have been scanned and their corresponding frame

buffer values modified. The process is then repeated for a second frame, a third frame,

etc. until all spot residuals have converged. In some embodiments and particularly

those represented by FIG. 4a, the pattern in the frame buffer represents the inverse of

the real-world image in the FOV at this point, akin to the way a photographic negative

represents the inverse of its corresponding real-world image.") paragraph 0077).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate manipulating framebuffers to adjust a

displayed image as taught by Wiklof et al. with an imaging system as taught by

Tokunaga et al. for the purpose of adjusting a displayed image.

Regarding claim 38, and as applied to claim 36 above, Tokunaga et al. discloses

a computer program product that, when executed, an imaging system provides screen

data to a served station and adjusts the quantity to suit the current network level of

performance. This reads on the claimed "The computer program, as set forth in claim

36, wherein the plurality of screen updates are modified ..." (("The present invention

relates to an image data communicating apparatus and a communication data quantity

adjusting method used in an image data communication system suitable for used when

image data such as video images or the like is transferred in a network environment.")

column 1 lines 8-12). However, Tokunaga et al. fails to teach using a framebuffer to

manipulate a displayed image. Wiklof et al. discloses a computer program product that,

when executed, modifies a framebuffer to adjust displayed images. This reads on the

claimed "... the plurality of screen updates are modified by adjusting a frame buffer

scanning algorithm." (("FIG. 2 is a block diagram that illustrates one control approach for

adjusting variable illuminator intensity. Initially, a drive circuit drives the light source

based upon a pattern, which may be embodied as digital data values in a frame buffer

202. The frame buffer 202 drives variable illuminator 109, which may, for instance

comprise an illuminator and scanner as in FIG. 1. For each spot or region, the amount

of scattered light is detected and converted into an electrical signal by detector 116.

Detector 116 may include an A/D converter that outputs the electrical signal as a binary

value, for instance. One may refer to this detected value as a residual. The residual is

inverted by inverter 208, and is optionally processed by optional intra-frame image

processor 210. The inverted residual or processed value is then added to the

corresponding value in the frame buffer 202 by adder 212. This proceeds through the

entire frame or FOV until all spots have been scanned and their corresponding frame

buffer values modified. The process is then repeated for a second frame, a third frame, etc. until all spot residuals have converged. In some embodiments and particularly those represented by FIG. 4a, the pattern in the frame buffer represents the inverse of the real-world image in the FOV at this point, akin to the way a photographic negative represents the inverse of its corresponding real-world image.") paragraph 0077).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate manipulating framebuffers to adjust a displayed image as taught by Wiklof et al. with an imaging system as taught by Tokunaga et al. for the purpose of adjusting a displayed image.

Claims 21, 28, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tokunaga et al. (US 5968132 A) in view of Ueda (US 20020018587 A1).

Regarding claim 21, and as applied to claim 15 above, Tokunaga et al. discloses a method wherein an imaging system provides screen data to a served station. This reads on the claimed "The method of claim 15, comprising ... screen data ... transmission to the server station." (("The present invention relates to an image data communicating apparatus and a communication data quantity adjusting method used in an image data communication system suitable for used when image data such as video images or the like is transferred in a network environment.") column 1 lines 8-12). However, Tokunaga et al. fails to teach a method of encoding an image. Ueda discloses encoding an image signal into a digitized image signal. This reads on the claimed "...

encoding the screen data for transmission to the server station." (("In addition, the image distribution apparatus preferably comprises a data rate memory unit which prestores plural sets of data rate groups consisted of one or more of the data rates, and data rate setting means for setting the data rate of the digitized image signal by selecting from the plural stored sets of the data rate groups, and wherein the image encoding unit encodes the image signal to the digitized image signal at all the rates included in the selected data rate group. In such a manner, the data rate of a digitized image signal generated by the encoding unit can be easily changed to a suitable value.") paragraph 0015).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate encoding image signals as taught by Ueda with sending an image to a screen as taught by Tokunaga et al. for the purpose of scalable image compression.

Regarding claim 28, and as applied to claim 24 above, Tokunaga et al. discloses a computer program product that, when executed, an imaging system provides screen data to a served station. This reads on the claimed "The computer program, as set forth in claim 24, comprising ... updates based on the measurement of network performance." (("The present invention relates to an image data communicating apparatus and a communication data quantity adjusting method used in an image data communication system suitable for used when image data such as video images or the like is transferred in a network environment.") column 1 lines 8-12). However, Tokunaga et al. fails to disclose a computer program product that, when executed,

encodes an image. Ueda discloses encoding an image signal into a digitized image signal. This reads on the claimed "... a routine for encoding the screen updates ..." (("In addition, the image distribution apparatus preferably comprises a data rate memory unit which prestores plural sets of data rate groups consisted of one or more of the data rates, and data rate setting means for setting the data rate of the digitized image signal by selecting from the plural stored sets of the data rate groups, and wherein the image encoding unit encodes the image signal to the digitized image signal at all the rates included in the selected data rate group. In such a manner, the data rate of a digitized image signal generated by the encoding unit can be easily changed to a suitable value.") paragraph 0015).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate encoding image signals as taught by Ueda with sending an image to a screen as taught by Tokunaga et al. for the purpose of scalable image compression.   °

Regarding claim 34, and as applied to claim 31 above, Tokunaga et al. discloses a method wherein an imaging system provides dynamically modified screen data to a served station. This reads on the claimed "The method of claim 31, wherein dynamically modifying the plurality of screen updates ... based on the network performance." (("The present invention relates to an image data communicating apparatus and a communication data quantity adjusting method used in an image data communication system suitable for used when image data such as video images or the like is transferred in a network environment.") column 1 lines 8-12). However, Tokunaga et al.

fails to teach a method of encoding an image. Ueda discloses encoding an image signal into a digitized image signal. This reads on the claimed "... dynamically modifying the plurality of screen updates comprises adjusting an encoding algorithm based on the network performance." (("In addition, the image distribution apparatus preferably comprises a data rate memory unit which prestores plural sets of data rate groups consisted of one or more of the data rates, and data rate setting means for setting the data rate of the digitized image signal by selecting from the plural stored sets of the data rate groups, and wherein the image encoding unit encodes the image signal to the digitized image signal at all the rates included in the selected data rate group. In such a manner, the data rate of a digitized image signal generated by the encoding unit can be easily changed to a suitable value.") paragraph 0015).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate encoding image signals as taught by Ueda with adjusting the rate at which an image is sent to a screen depending on current network performance as taught by Tokunaga et al. for the purpose of scalable image compression.

Regarding claim 35, and as applied to claim 31 above, Tokunaga et al. discloses a method wherein an imaging system provides dynamically modified screen data to a served station. This reads on the claimed "The method of claim 31, comprising ... the plurality of screen updates for transmission to the served station." (("The present invention relates to an image data communicating apparatus and a communication data quantity adjusting method used in an image data communication system suitable for

used when image data such as video images or the like is transferred in a network

environment.") column 1 lines 8-12). However, Tokunaga et al. fails to teach a method

of encoding an image. Ueda discloses encoding an image signal into a digitized image

signal. This reads on the claimed "… encoding the plurality of screen updates for

transmission to the served station." (("In addition, the image distribution apparatus

preferably comprises a data rate memory unit which prestores plural sets of data rate

groups consisted of one or more of the data rates, and data rate setting means for

setting the data rate of the digitized image signal by selecting from the plural stored sets

of the data rate groups, and wherein the image encoding unit encodes the image signal

to the digitized image signal at all the rates included in the selected data rate group. In

such a manner, the data rate of a digitized image signal generated by the encoding unit

can be easily changed to a suitable value.") paragraph 0015).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate encoding screen updates as taught by

Ueda with adjusting the quantity of data transmitted across a network depending on the

current bandwidth as taught by Tokunaga et al. for the purpose of optimal network

performance and data integrity.

Claims 22, 30 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Tokunaga et al. (US 5968132 A) in view of Swami (US 20040165538 A1).

Regarding claim 22, and as applied to claim 15 above, Tokunaga et al. discloses

a method wherein an imaging system provides screen data to a served station. This

reads on the claimed "The method of claim 21, wherein adjusting comprises modifying a data transmission algorithm that compresses the screen data based on the network performance." (("The present invention relates to an image data communicating apparatus and a communication data quantity adjusting method used in an image data communication system suitable for used when image data such as video images or the like is transferred in a network environment.") column 1 lines 8-12). However, Tokunaga et al. fails to teach a method comprising a data transmission algorithm. Swami discloses a method wherein a data transmission algorithm is used to ascertain network bandwidth. This reads on the claimed "The method of claim 21, wherein adjusting comprises modifying a data transmission algorithm that compresses the screen data based on the network performance." (("The SS_THRESH is a threshold value used to determine whether the slow start or congestion avoidance algorithm should be used to control data transmission. When segments are first introduced into the network, the conditions are unknown, and the transport layer may slowly probe the network to ascertain the available capacity for the particular path. This is performed to minimize the chances of causing congestion in the network.") paragraph 0065).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate use of data transmission algorithms as taught by Swami with an imaging system as taught by Tokunaga et al. for the purpose of efficiently moving data across a network.

Regarding claim 30, and as applied to claim 24 above, Tokunaga et al. discloses a computer program product that, when executed, an imaging system provides screen

data to a served station. This reads on the claimed "The computer program, as set forth in claim 24, wherein the plurality of screen updates is modified ..." (("The present invention relates to an image data communicating apparatus and a communication data quantity adjusting method used in an image data communication system suitable for used when image data such as video images or the like is transferred in a network environment.") column 1 lines 8-12). However, Tokunaga et al. fails to teach a computer program product comprising a data transmission algorithm. Swami discloses a computer program product that, when executed, a data transmission algorithm is used to ascertain network bandwidth. This reads on the claimed "... the plurality of screen updates is modified by adjusting a data transmission algorithm." (("The SS_THRESH is a threshold value used to determine whether the slow start or congestion avoidance algorithm should be used to control data transmission. When segments are first introduced into the network, the conditions are unknown, and the transport layer may slowly probe the network to ascertain the available capacity for the particular path. This is performed to minimize the chances of causing congestion in the network.") paragraph 0065).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate use of data transmission algorithms as taught by Swami with an imaging system as taught by Tokunaga et al. for the purpose of efficiently moving data across a network.

Regarding claim 39, and as applied to claim 36 above, Tokunaga et al. discloses a computer program product that, when executed, an imaging system provides screen

data to a served station. This reads on the claimed "The computer program, as set forth

in claim 36, wherein the plurality of screen updates are modified ..." (("The present

invention relates to an image data communicating apparatus and a communication data

quantity adjusting method used in an image data communication system suitable for

used when image data such as video images or the like is transferred in a network

environment.") column 1 lines 8-12). However, Tokunaga et al. fails to teach a

computer program product comprising a data transmission algorithm. Swami discloses

a computer program product that, when executed, a data transmission algorithm is used

to ascertain network bandwidth. This reads on the claimed "... the plurality of screen

updates are modified by adjusting a data transmission algorithm." (("The SS_THRESH

is a threshold value used to determine whether the slow start or congestion avoidance

algorithm should be used to control data transmission. When segments are first

introduced into the network, the conditions are unknown, and the transport layer may

slowly probe the network to ascertain the available capacity for the particular path. This

is performed to minimize the chances of causing congestion in the network.") paragraph

0065).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate use of data transmission algorithms as

taught by Swami with an imaging system as taught by Tokunaga et al. for the purpose

of efficiently moving data across a network.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Tokunaga et al. (US 5968132 A) in view of Machida (US 6642943 B1).

Regarding claim 23, and as applied to claim 15 above, Tokunaga et al. discloses a computer program product that, when executed, an imaging system provides screen data to a served station. This reads on the claimed "The method of claim 15, ... displaying ... at one of the serving station ..." (("The present invention relates to an image data communicating apparatus and a communication data quantity adjusting method used in an image data communication system suitable for used when image data such as video images or the like is transferred in a network environment.") column 1 lines 8-12). However, Tokunaga et al. fails to teach a method of displaying network traffic or congestion. Machida discloses a method wherein network traffic quantity information is acquired and displayed. This reads on the claimed "... displaying an indication of the network performance at one of the serving station and the served station based on the measurement of the network performance." (("Conversely, if judged in the step S809 that the network traffic quantity display is instructed, the flow advances to a step S810 to acquire network traffic quantity information (not shown) from the management server, and the flow further advances to a step S811 to display the acquired information in the user's desired form (list display, graph display or the like). It should be noted that this display form is indicated when the network traffic quantity display is instructed.") column 37 lines 9-17).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate displaying network traffic as taught by Machida with displaying an image as taught by Tokunaga et al. for the purpose of monitoring the health of a network.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Tokunaga et al. (US 5968132 A) as modified by Machida (US 6642943 B1) and in

further view of Kake et al. (US 20040054667 A1).

Regarding claim 26, and as applied to claim 24 above, Tokunaga et al. discloses

a computer program product that, when executed, an imaging system provides screen

data to a served station. This reads on the claimed "The computer program, as set forth

in claim 24, ... displaying ... at least one of the serving station and the served station ..."

(("The present invention relates to an image data communicating apparatus and a

communication data quantity adjusting method used in an image data communication

system suitable for used when image data such as video images or the like is

transferred in a network environment.") column 1 lines 8-12). However, Tokunaga et al.

fails to teach a computer program product for displaying network traffic or congestion.

Machida discloses a computer program product that, when executed, network traffic

quantity information is acquired and displayed. This reads on the claimed "... displaying

an indication of the network performance on at least one of the serving station ... based

on the measurement of the network performance." (("Conversely, if judged in the step

S809 that the network traffic quantity display is instructed, the flow advances to a step

S810 to acquire network traffic quantity information (not shown) from the management

server, and the flow further advances to a step S811 to display the acquired information

in the user's desired form (list display, graph display or the like). It should be noted that

this display form is indicated when the network traffic quantity display is instructed.")

column 37 lines 9-17). Therefore, it would have been obvious to a person of ordinary

skill in the art at the time the invention was made to incorporate displaying network traffic as taught by Machida with displaying an image as taught by Tokunaga et al. for the purpose of monitoring the health of a network. However, Tokunaga et al., as modified by Machida, fails to disclose a computer program product that, when executed, network traffic is displayed on a served station. Kake et al. discloses a computer program product that, when executed, a client terminal apparatus displays the present congestion status of a network. This reads on the claimed "… displaying an indication of the network performance on at least one of the … served station based on the measurement of the network performance." (("The present invention may be applied to a client terminal apparatus provided with a network linking function, which allows access to Web sites on a network such as, for example, the Internet. With the client terminal apparatus according to embodiments of this present invention, present congestion status of the network and update status of, for example, Web sites saved by a "bookmarking function", Web sites searched by a "search function" or Web sites saved as "History" of Web sites the user has accessed in the past and the like, may be confirmed.") paragraph 0036).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate displaying network traffic on a client as taught by Kake et al. with displaying an image on a server as taught by Tokunaga et al., as modified by Machida, for the purpose of monitoring the health of a network from remote locations.

Claims 32 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tokunaga et al. (US 5968132 A) in view of Aweya et al. (US 7047312 B1).

Regarding claim 32, and as applied to claim 31 above, Tokunaga et al. discloses a method wherein network performance is measured from a served station. This reads on the claimed "The method of claim 31, wherein the network performance corresponds to ... a network coupling the serving station ...." (("... the network transmitting unit 40b computes a rate of change in current traffic value relative to the traffic value detected using initial survey data (refer to Step S2 in FIG. 10 described hereinbefore) (Step S9), and sets (marks) a flag in a region corresponding to the rate of change in traffic value obtained as a result of the computation in the compression parameter table 40-2 (Step S10).") column 22 lines 1-7). However, Tokunaga et al. fails to teach using TCP packets to test network latency. Aweya et al. discloses a system wherein the window control mechanism of TCP is used to gauge network latency. This reads on the claimed "... network performance corresponds to the latency of a network ..." (("In a high-latency network environment, the window flow control mechanism of TCP may not be very effective because it relies on packet loss to signal congestion, instead of avoiding congestion and buffer overflow.") column 1 lines 38-41).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate latency testing of networks as taught by Aweya et al. with network performance testing as taught by Tokunaga et al. for the purpose of network analysis for optimal performance of a network.

Regarding claim 37, and as applied to claim 36 above, Tokunaga et al. discloses a computer program product that, when executed, causes network performance to be measured from a served station. This reads on the claimed "The computer program, as set forth in claim 36, wherein the network performance is based on a measurement of network latency." (("... the network transmitting unit 40b computes a rate of change in current traffic value relative to the traffic value detected using initial survey data (refer to Step S2 in FIG. 10 described hereinbefore) (Step S9), and sets (marks) a flag in a region corresponding to the rate of change in traffic value obtained as a result of the computation in the compression parameter table 40-2 (Step S10).") column 22 lines 1-7). However, Tokunaga et al. fails to teach using TCP packets to test network latency. Aweya et al. discloses a computer program product that, when executed, the window control mechanism of TCP is used to gauge network latency. This reads on the claimed "The computer program, as set forth in claim 36, wherein the network performance is based on a measurement of network latency." (("In a high-latency network environment, the window flow control mechanism of TCP may not be very effective because it relies on packet loss to signal congestion, instead of avoiding congestion and buffer overflow.") column 1 lines 38-41).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate latency testing of networks as taught by Aweya et al. with network performance testing as taught by Tokunaga et al. for the purpose of network analysis for optimal performance of a network.

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huffman (US 20040054667 A1) as modified by Machida (US 6642943 B1) and in further view of Kelley et al. (US 20020082864 A1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Regarding claim 43, and as applied to claim 42 above. Huffman, as modified by Machida, clearly shows and discloses a medical imaging system wherein an imaging system detects a plurality of signals that are convertible into an image; an imaging system produces image data; a server receives image data, a coefficient block scans

pixel coordinates of the image data; a compression engine to modify an encoding

format of the image data, a client receiving image data from the server via a network,

and a plurality of network sensors for detecting network congestion. This reads on the

claimed "The remote viewing system of claim 42, ... the medical imaging system ...".

However, Huffman, as modified by Machida, fails to teach a medical imaging system

comprising computed tomography imaging, magnetic resonance imaging,

tomosynthesis, positron emission tomography imaging, or X-ray imaging. Kelley et al.

discloses a method wherein an imaging system comprises a computed tomography

imaging system, an magnetic resonance imaging system, a tomosynthesis system, a

positron emission tomography imaging system, and a X-ray imaging system. This reads

on the claimed "... the imaging system comprises one of a computed tomography

imaging system, an magnetic resonance imaging system, a tomosynthesis system, a

positron emission tomography imaging system, and a X-ray imaging system."

(("Currently, a number of modalities exist for medical diagnostic and imaging systems.

These include computed tomography (CT) systems, x-ray systems (including both

conventional and digital or digitized imaging systems), magnetic resonance (MR)

systems, positron emission tomography (PET) systems, ultrasound systems, nuclear

medicine systems, and so forth. In many instances, these modalities complement one

another and offer the physician a range of techniques for imaging particular types of

tissue, organs, physiological systems, and so forth. Health care institutions often

dispose of several such imaging systems at a single or multiple facilities, permitting its

physicians to draw upon such resources as required by particular patient needs.")

paragraph 0004).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate magnetic resonance tomography (MRT)

as taught by Kelley et al. with a medical imaging system that transits imaging data

across a network depending on the current performance of said network as taught by

Huffman, as modified by Machida, for the purpose of rendering medical images of the

inside of an object across a network.

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huffman

(US 20040054667 A1) as modified by Machida (US 6642943 B1) and in further view of

Kake et al. (US 20040054667 A1).

Regarding claim 44, and as applied to claim 42 above, Huffman, as modified by

Machida, discloses a remote viewing system for a medical imaging system that provides

screen data to a served station; and network traffic quantity information is acquired and

displayed. This reads on the claimed "The remote viewing system of claim 42, wherein

the serving station is configured to present ...". However, Huffman, as modified by

Machida, fails to disclose network traffic displayed on a remote viewing system. Kake et

al. discloses a client terminal apparatus that displays the present congestion status of a

network. This reads on the claimed "The remote viewing system ... is configured to

present an indication associated with the network performance data to an operator."

(("The present invention may be applied to a client terminal apparatus provided with a

network linking function, which allows access to Web sites on a network such as, for example, the Internet. With the client terminal apparatus according to embodiments of this present invention, present congestion status of the network and update status of, for example, Web sites saved by a "bookmarking function", Web sites searched by a "search function" or Web sites saved as "History" of Web sites the user has accessed in the past and the like, may be confirmed.") paragraph 0036).

It is inherent that an operator would view network performance data on a remote viewing system.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate displaying network traffic on a client as taught by Kake et al. with displaying an image on a server as taught by Huffman., as modified by Machida, for the purpose of monitoring the health of a network from remote locations in a medical imaging environment.

Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huffman (US 20040054667 A1) as modified by Machida (US 6642943 B1) and in further view of Tokunaga et al. (US 5968132 A).

Regarding claim 45, and as applied to claim 42 above, Huffman, as modified by Machida, discloses a remote viewing system for a medical imaging system that provides screen data to a served station; and a plurality of network sensors in communication with the serving station and configured to provide network performance data to the serving station. This reads on the claimed "The remote viewing system of claim 42,

wherein the plurality of network sensors ... determine network performance.". However, Huffman, as modified by Machida, fails to disclose a method of using TCP packets to determine network bandwidth. Tokunaga et al. discloses a method of determining a network traffic value by the number of collisions that a sent packet encounters. This reads on the claimed "... network sensors exchange a plurality of packets to determine network performance." (("In this embodiment described above, a traffic value is determined using survey data. However, this invention is not limited to the above example, but it is possible that the OS/network driver 41 detects the number of times of collision of packets in the network apparatus 23, and the detected number of times of collision of packets is used as a traffic value. In which case, a table including the number of times of collision and the number of frames is prepared to determine the number of image transferring frames using this table.") column 16 lines 17-26).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate using TCP packets to determine network traffic as taught by Tokunaga et al. with displaying a medical image on a remote server as taught by Huffman, as modified by Machida, for the purpose of efficiently using a network to transmit data intensive medical images.

Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huffman (US 20040054667 A1) as modified by Machida (US 6642943 B1) and in further view of Wiklof et al. (US 20050023356).

Regarding claim 48, and as applied to claim 42 above, Huffman, as modified by

Machida, discloses a remote viewing system for a medical imaging system that provides

screen data to a served station; and configured to provide network performance data to

the serving station. This reads on the claimed "The remote viewing system of claim 42,

wherein the serving station ... transmit ... image data ...". However, Huffman, as

modified by Machida, fails to teach using a framebuffer to manipulate a displayed

image. Wiklof et al. discloses a system that modifies a framebuffer to adjust displayed

images. This reads on the claimed "... the serving station utilizes a remote framebuffer

protocol to transmit the modified image data in the served station." (("FIG. 2 is a block

diagram that illustrates one control approach for adjusting variable illuminator intensity.

Initially, a drive circuit drives the light source based upon a pattern, which may be

embodied as digital data values in a frame buffer 202. The frame buffer 202 drives

variable illuminator 109, which may, for instance comprise an illuminator and scanner as

in FIG. 1. For each spot or region, the amount of scattered light is detected and

converted into an electrical signal by detector 116. Detector 116 may include an A/D

converter that outputs the electrical signal as a binary value, for instance. One may refer

to this detected value as a residual. The residual is inverted by inverter 208, and is

optionally processed by optional intra-frame image processor 210. The inverted residual

or processed value is then added to the corresponding value in the frame buffer 202 by

adder 212. This proceeds through the entire frame or FOV until all spots have been

scanned and their corresponding frame buffer values modified. The process is then

repeated for a second frame, a third frame, etc. until all spot residuals have converged.

In some embodiments and particularly those represented by FIG. 4a, the pattern in the

frame buffer represents the inverse of the real-world image in the FOV at this point, akin

to the way a photographic negative represents the inverse of its corresponding real-

world image.") paragraph 0077).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate manipulating framebuffers to adjust a

displayed image as taught by Wiklof et al. with a remote medical imaging system as

taught by Tokunaga et al. for the purpose of adjusting a remotely displayed medical

displayed image.

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure:

'Company in the Spotlight: UPMC-inspired Stentor to challenge in medical

imaging', Pamela Gaynor, post-gazette.com, July 9, 2000

'Stentor: Just what the doctor ordered', Jason Meserve, Network World,

November 12, 2001

'PAC Pays (Really)', Lin Muschlitz, Technology Management, February, 2000

'A Practical Discrete Multitone Transceiver Loading Algorithm for Data

Transmission over Spectrally Shaped Channels', Peter Chow, John Cioffi, John

Bingham, IEEE Transactions on Communications, vol 43, no 2/3/4,

February/March/April 1995

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Examiner should be directed to Mark Fearer whose telephone number is (571) 270-

1770. The Examiner can normally be reached on Monday-Thursday from 7:30am to

5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

supervisor, Rafael Pérez-Gutiérrez can be reached on (571) 272-7915. The fax phone

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Mark Fearer
M.D.F./mdf
March 26, 2007